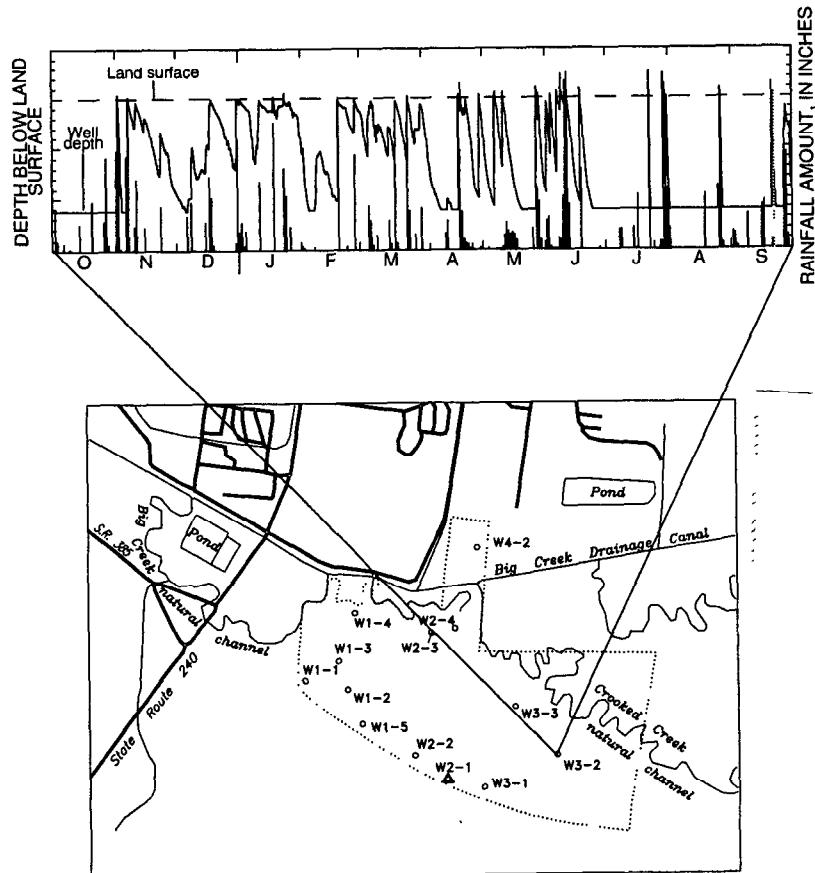


Rainfall and Water-Level Data for a Wetland Area near Millington, Shelby County, Tennessee, October 1995 through September 1996

Open-File Report 97-221



Prepared by the
U.S. Geological Survey
in cooperation with the
Tennessee Department of Transportation



Cover illustration: See figures 1 and 5.

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By Rodney R. Knight

U.S. GEOLOGICAL SURVEY

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Prepared in cooperation with the
TENNESSEE DEPARTMENT OF TRANSPORTATION



Nashville, Tennessee
1997

**U.S. DEPARTMENT OF THE INTERIOR
BRUCE BABBITT, Secretary**

**U.S. GEOLOGICAL SURVEY
Gordon P. Eaton, Director**

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CONTENTS

Abstract.....	1
Introduction	1
Purpose and Scope.....	1
Study Area	1
Rainfall Data.....	3
Water-Level Data.....	3
Summary.....	9
References Cited.....	9
Supplemental Data.....	11

FIGURES

1. Map showing location of study area and data-collection sites	2
2-6. Graphs showing:	
2. Daily rainfall amounts at wetland and hourly water levels recorded at wells W1-1, W1-2, and W1-3, October 1, 1995 through September 30, 1996	4
3. Daily rainfall amounts at wetland and hourly water levels recorded at wells W1-4, W1-5, and W2-1, October 1, 1995 through September 30, 1996	5
4. Daily rainfall amounts at wetland and hourly water levels recorded at wells W2-2, W2-3, and W2-4, October 1, 1995 through September 30, 1996	6
5. Daily rainfall amounts at wetland and hourly water levels recorded at wells W3-1, W3-2, and W3-3, October 1, 1995 through September 30, 1996	7
6. Daily rainfall amounts at wetland and hourly water levels recorded at well W4-2, October 1, 1995 through September 30, 1996	8

TABLES

1. Summary of water levels recorded at wells in the Millington, Tennessee study area, October 1, 1995 to September 30, 1996	8
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CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To Obtain
inch (in.)	0.0254	meter
foot (ft)	0.3048	meter
acre	0.4047	hectare

Sea level: In this report “sea level” refers to the National Geodetic Vertical Datum of 1929—a geodetic datum derived from a general adjustment of first-order level nets of the United States and Canada, formerly called Sea Level Datum of 1929.

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ABSTRACT

Rainfall amounts and water levels were collected at a wetland area near Millington, Shelby County, Tennessee, to assist the Tennessee Department of Transportation with a program of wetland restoration. The site is located along a channelized reach of Big Creek Drainage Canal, east of State Route 240, and near the southern boundary of Naval Support Activity Memphis. Rainfall amounts and water levels for the site were recorded from October 1, 1995 to September 30, 1996. Total rainfall for this period was 47.58 inches. In general, water levels at the wetland were above or near the ground surface during the 6-month period from the first of January through the end of June 1996. For the remainder of the year, water levels generally subsided to several feet below land surface. However, some locations within the wetland were wet or highly saturated year round.

INTRODUCTION

In recent years, restoring and preserving wetlands has become an important environmental initiative. Wetlands perform many vital functions in maintaining the ecological integrity of regional environments. Wetlands provide storage and filtration of surface water, diverse habitats for plants and animals, corridors for the movements of animals and dissemination of plants, and a supply of nutrients to nearby aquatic environments (Light and others, 1993). Wetlands have been defined as "those areas that are inundated or saturated by surface or ground water at a

frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (Sipple, 1987).

"No net loss of wetlands" (Lyon, 1993) is the objective of Section 404 of the Clean Water Act (U.S. Congress, 1977). In certain instances, the construction of buildings, roads, and other manmade structures may disrupt the functions of natural wetlands. Therefore, the protection, restoration, or creation of wetlands that have been disturbed or destroyed is necessary.

In 1993, the U.S. Geological Survey (USGS), in cooperation with the Tennessee Department of Transportation (TDOT), began monitoring hydrologic conditions at a wetland area near Millington, Shelby County, Tennessee, to define land surface inundation and saturation conditions prior to wetland restoration. The site is located along a channelized reach of Big Creek Drainage Canal, east of State Route 240, and near the southeastern boundary of the Naval Support Activity Memphis (fig. 1).

Purpose and Scope

The purpose of this report is to summarize rainfall and water-level data recorded at a wetland area near Millington, Tennessee, during October 1, 1995 to September 30, 1996. This report supplements information recorded at this site during June 1993 through June 1994 (Robinson and others, 1996) and July 1994 to September 1995 (Robinson and Diehl, 1996).

Study Area

The wetland study area is located along a channelized reach of Big Creek Drainage Canal near

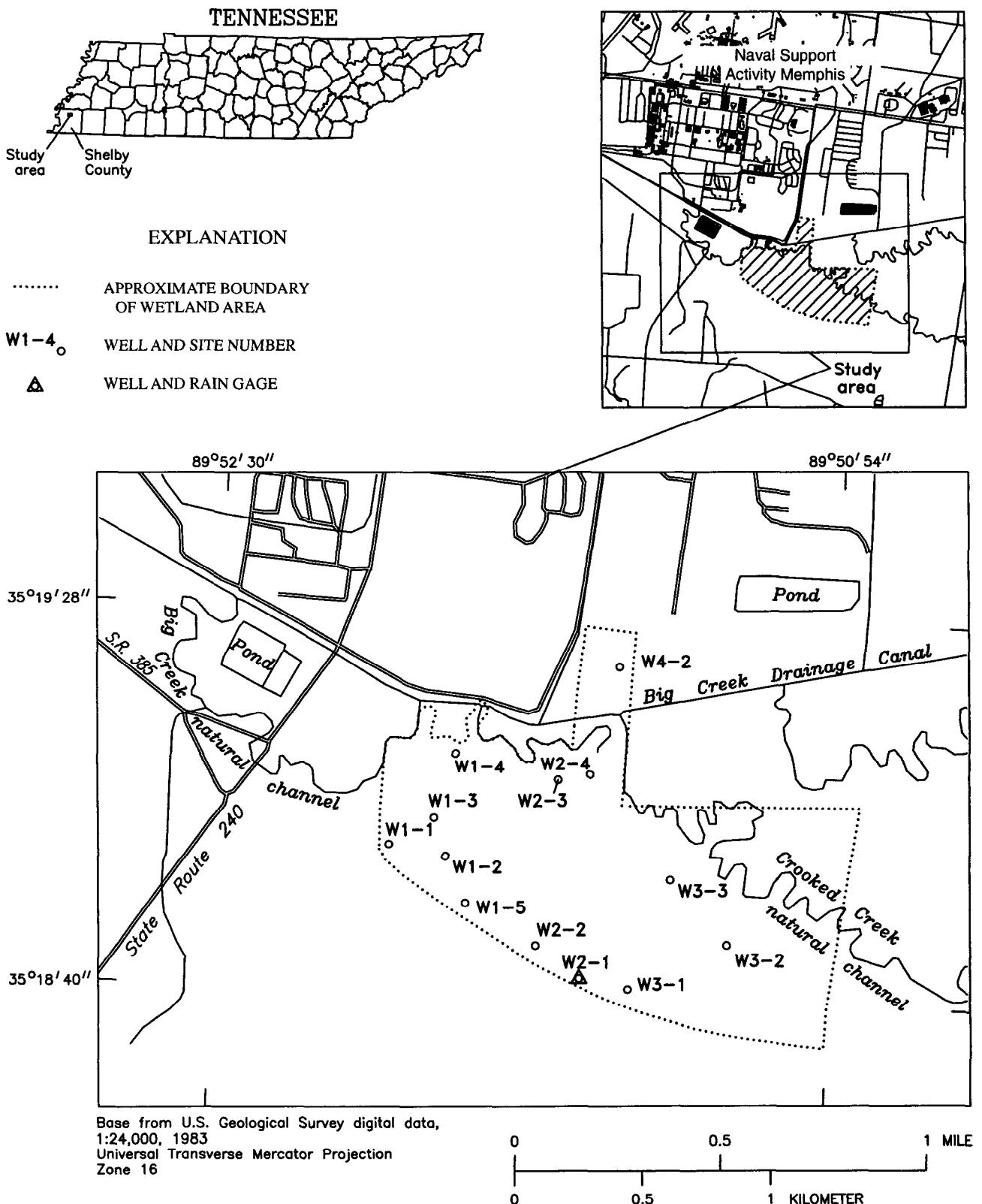


Figure 1. Location of study area and data-collection sites.

Millington, Shelby County, Tennessee. The site is approximately 370 acres in the flood plain along a 6,200-foot reach of Big Creek Drainage Canal. Crooked Creek, a natural stream, flows through the wetland and enters Big Creek within the study area. The site also receives surface runoff from about 400 acres of surrounding land. Big Creek Drainage Canal flows to the southwest and empties into the Loosahatchie River at a point approximately 10 miles upstream from the Mississippi River.

Soils in the Millington wetland area include the somewhat poorly drained Calloway silt loam and Falaya silt loam, and the poorly drained Waverly silt loam and Henry silt loam (Sease and others, 1970; J.C. Jenkins, Soil Conservation Service, oral commun., 1993). The average growing season in the area, defined as the average period between the last spring frost and the first autumn frost, is from March 15 to November 12 (M.E. Zeman, Natural Resources Conservation Service, written commun., 1995). In the past, the wetland area had been drained and was used for crop farming.

RAINFALL DATA

Rainfall amounts were measured using a tipping-bucket rain gage located at well W2-1 (fig. 1) and were recorded at 5-minute intervals from October 1, 1995 through September 30, 1996. Daily rainfall amounts for this period are provided in the Supplemental Data section of this report. The rainfall amount recorded by the rain gage from October 1, 1995 through September 30, 1996 totaled 47.58 inches.

WATER-LEVEL DATA

Water levels were recorded at 1-hour intervals at thirteen 8-inch-diameter wells. The wells used to monitor water levels at the site are typically about 2 feet deep. The methods used for well construction are described in a report by Robinson and others (1996). Water levels in the study area were generally 2 feet or more below land surface during the fall (October through December 1995) and summer (July through

September 1996). During the winter and spring months, January through June 1996, water levels rose above the bottom of the wells and were generally within 2 feet of land surface. Plots of hourly water levels recorded at the 13 wells are provided in figures 2 through 6.

The amount of time water levels were either above land surface or within 1.5 feet of land surface was determined to evaluate site conditions and wetland hydrology. These conditions were determined for both the dry season, summer/fall, and wet season, winter/spring. The amount of time and the percentage of time water levels at each well were above land or within 1.5 feet of land surface during summer/fall and winter/spring were based on the daily mean water levels (table 1).

Water levels were above land surface only at three wells: W1-2, 55 percent of the winter/spring, W4-2, 93 percent during winter/spring, and W3-3, 52 percent during summer/fall and 86 percent during winter/spring. None of the other wells had water levels above land surface during October 1, 1995 to September 30, 1996 (figs. 2–6; table 1).

Water levels were within 1.5 feet of land surface for a higher percentage of time during winter/spring conditions than during summer/fall conditions. Ten wells, W1-1, W1-2, W1-3, W1-4, W1-5, W2-3, W2-4, W3-2, W3-3, and W4-2, had water levels within 1.5 feet of land surface for more than 50 percent of the time during winter/spring. Only one well, W3-3, had water levels within 1.5 feet of land surface for more than 50 percent of the time during summer/fall.

Ten of the 13 wells at the Millington site experienced wetland hydrology with water levels within 1.5 feet of land surface for 2 weeks or longer during the local growing season (March 15 through November 12). Three wells, W2-1, W2-2, and W3-1, had very few consecutive days with water-level depths within 1.5 feet of land surface during the growing season. In contrast, water levels at wells W1-2, W3-3, and W4-2 were above land surface for 1 week or longer during the growing season.

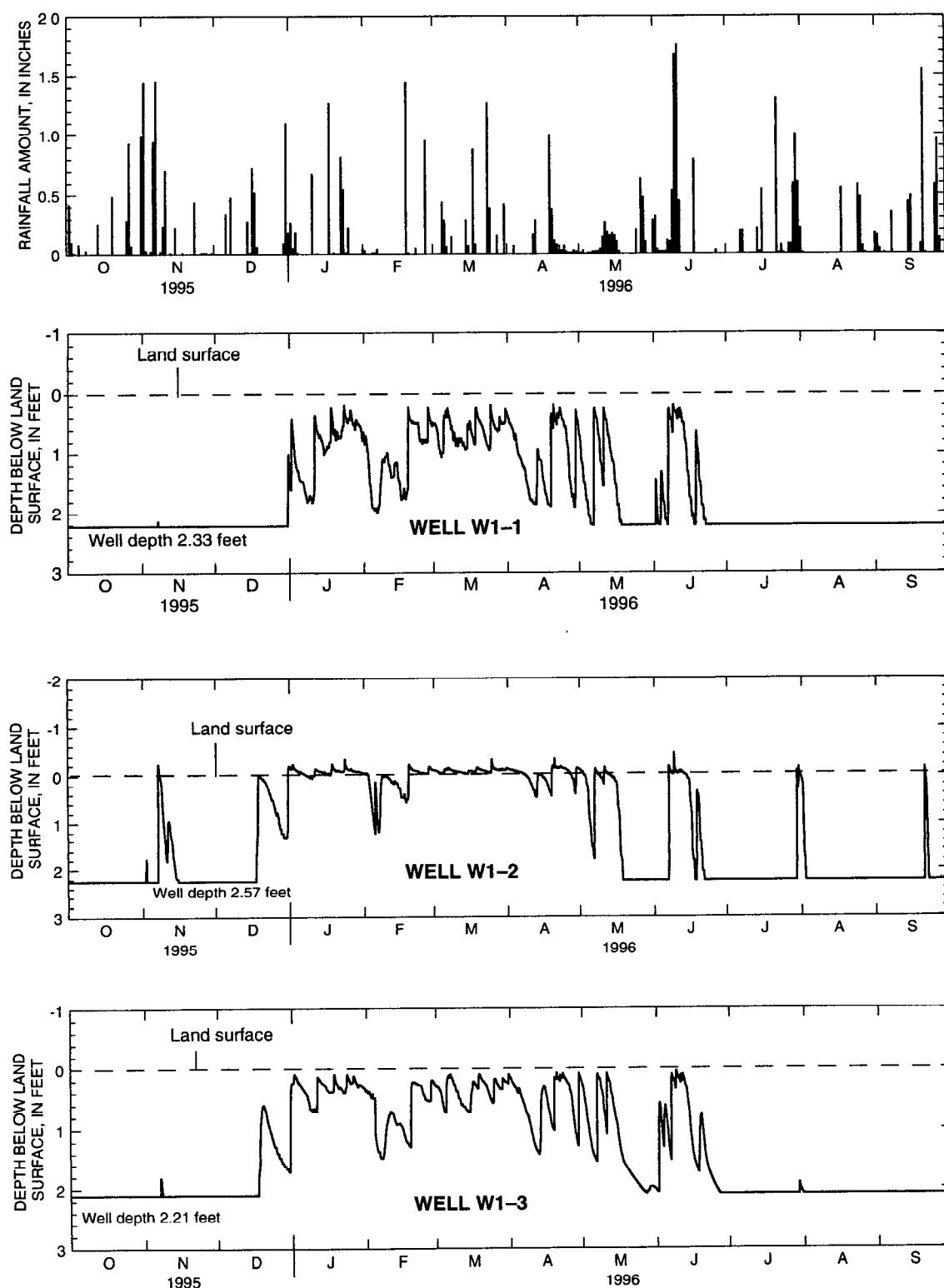


Figure 2. Daily rainfall amounts at wetland and hourly water levels recorded at wells W1-1, W1-2, and W1-3, October 1, 1995 through September 30, 1996.

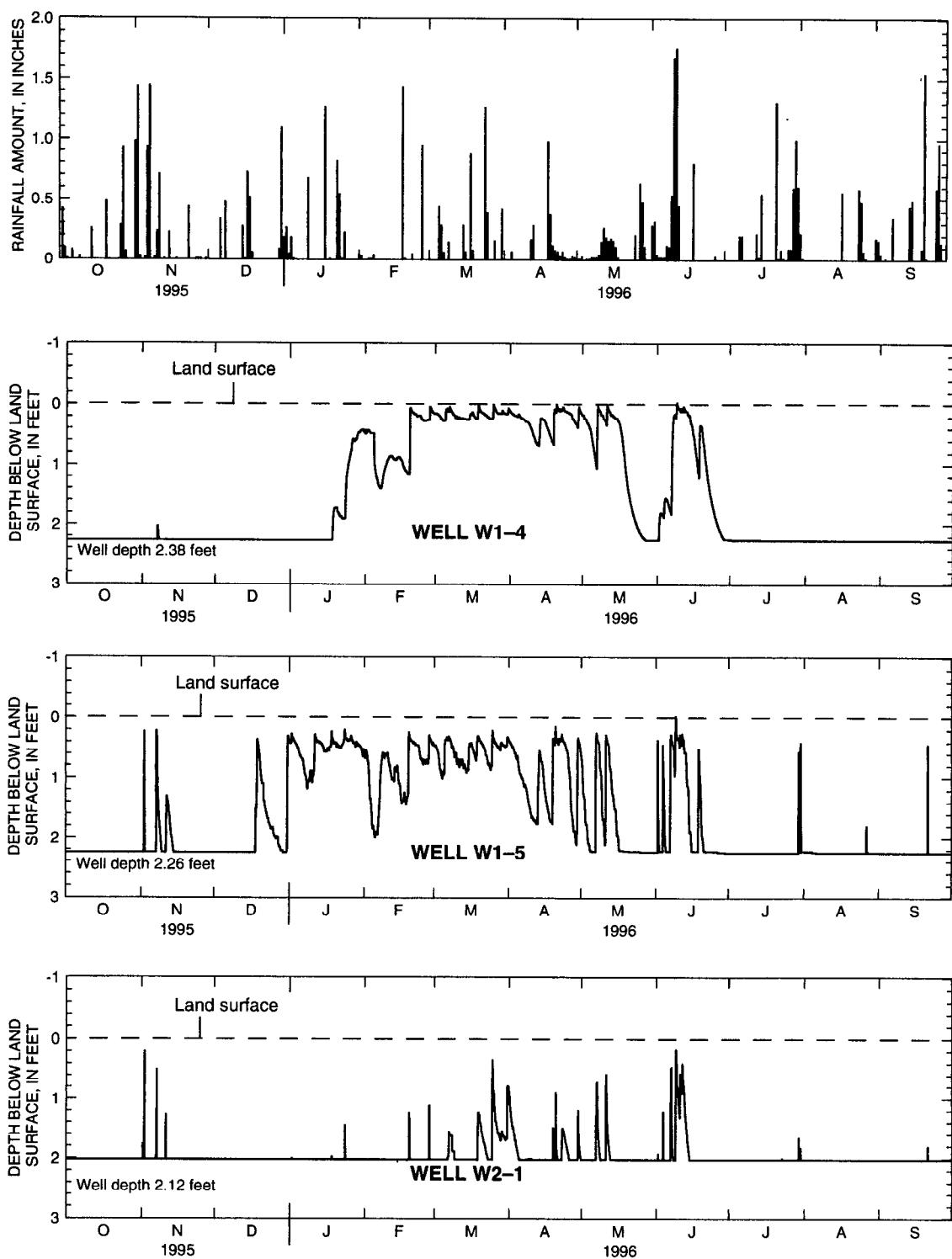


Figure 3. Daily rainfall amounts at wetland and hourly water levels recorded at wells W1-4, W1-5, and W2-1, October 1, 1995 through September 30, 1996.

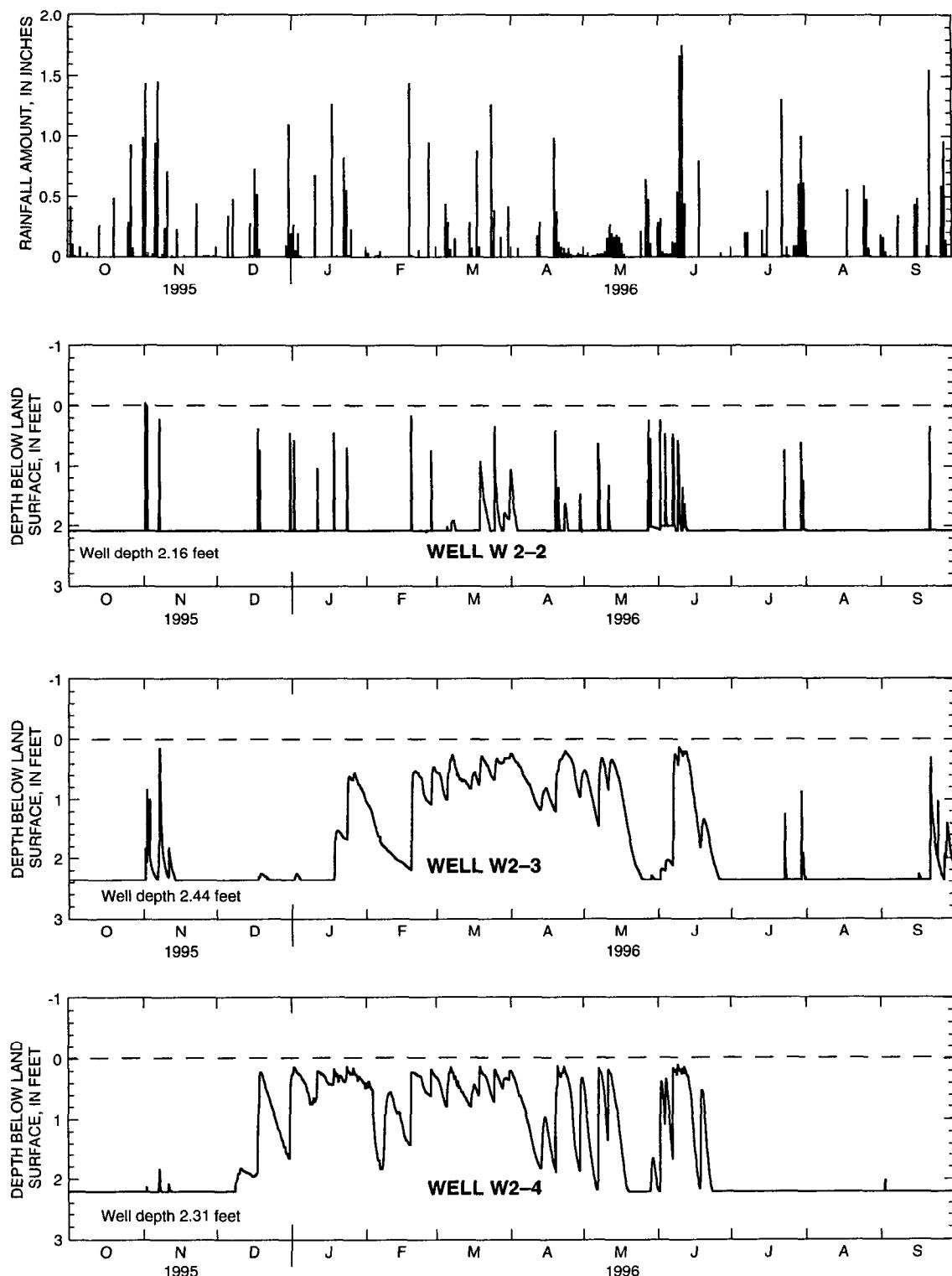


Figure 4. Daily rainfall amounts at wetland and hourly water levels recorded at wells W2-2, W2-3, and W2-4, October 1, 1995 through September 30, 1996.

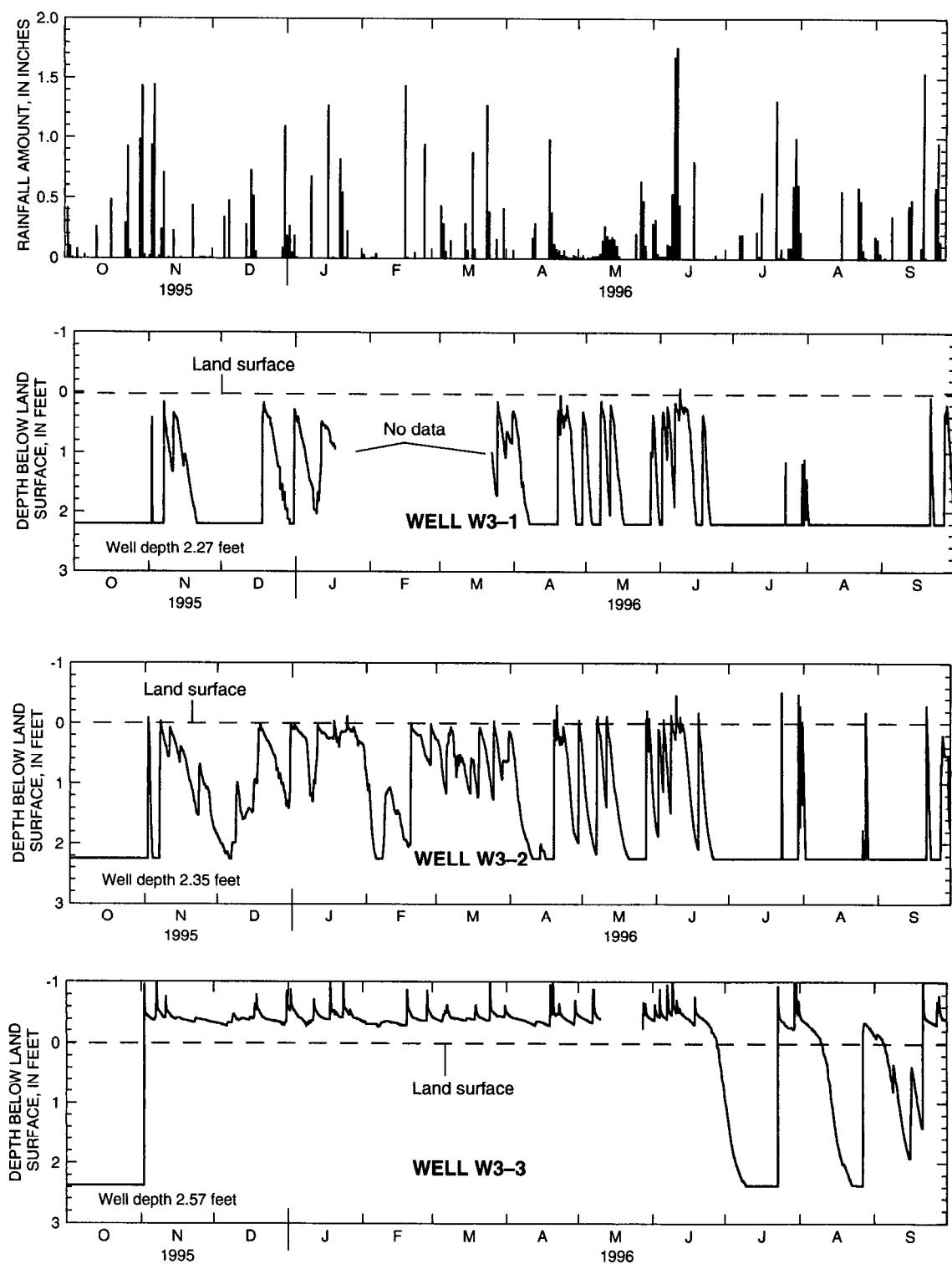


Figure 5. Daily rainfall amounts at wetland and hourly water levels recorded at wells W3-1, W3-2, and W3-3, October 1, 1995 through September 30, 1996.

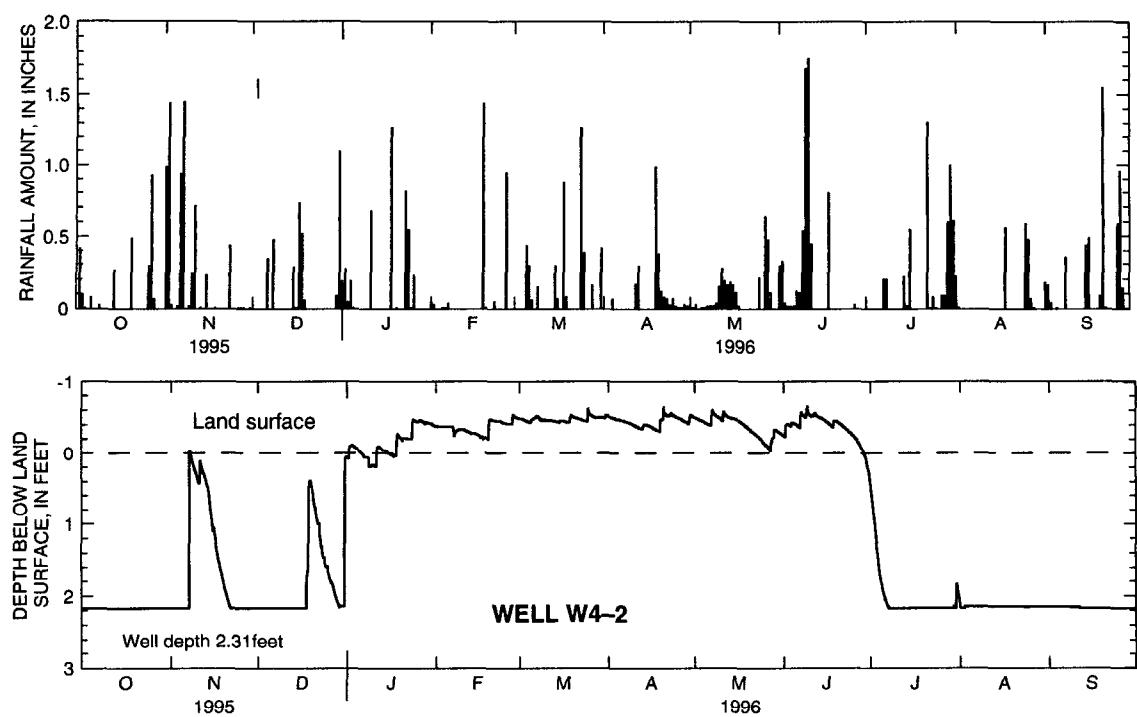


Figure 6. Daily rainfall amounts at wetland and hourly water levels recorded at well W4-2, October 1, 1995 through September 30, 1996.

Table 1. Summary of water levels recorded at wells in the Millington, Tennessee study area, October 1, 1995 to September 30, 1996
[Summer/fall, July through December; winter/spring, January through June]

Well number	Total days of record		Number of days and percentage of time mean daily water level was above land surface				Number of days and percentage of time mean daily water level was within 1.5 feet below land surface			
	Summer/ Fall	Winter/Spring	Summer/Fall		Winter/Spring		Summer/Fall		Winter/Spring	
			Days	Percent	Days	Percent	Days	Percent	Days	Percent
W1-1	184	182	0	0	0	0	0	0	121	66
W1-2	184	182	0	0	100	55	22	12	149	82
W1-3	184	182	0	0	0	0	10	5	154	85
W1-4	184	182	0	0	0	0	0	0	133	73
W1-5	184	182	0	0	0	0	5	3	130	71
W2-1	184	182	0	0	0	0	0	0	13	7
W2-2	184	182	0	0	0	0	1	0.5	6	3
W2-3	184	182	0	0	0	0	3	2	115	63
W2-4	184	182	0	0	0	0	12	6	140	77
W3-1	184	182	0	0	0	0	24	13	58	32
W3-2	184	182	0	0	0	0	52	28	130	71
W3-3	184	182	96	52	156	86	118	64	159	87
W4-2	184	182	0	0	170	93	21	11	182	100

SUMMARY

This report presents rainfall amounts and water levels recorded at wells at a degraded wetland site near Millington, Tennessee, during the period from October 1, 1995 to September 30, 1996. These data were collected by the U.S. Geological Survey to assist the Tennessee Department of Transportation with the implementation of a plan to restore the wetland to a more natural condition. In the past, the wetland had been cleared, drained, and used to farm row crops.

Rainfall data were recorded at 5-minute intervals during the period of study. Total rainfall was 47.58 inches.

Water levels recorded at 13 wells at the wetland indicate that land surface inundation and saturation conditions varied considerably during the year. The only well to be inundated during the summer and fall months was well W3-3, which was inundated 52 percent of the time. During the summer and fall, 10 of the 13 wells had mean daily water levels that were within 1.5 feet of land surface. The percentages of time that these 10 wells were in this range varied from 0.5 to 64 percent. Only one well, W3-3, had water levels within 1.5 feet of land surface for more than 50 percent of the time during summer/fall.

The winter and spring months provided the highest periods of inundation. Of the 13 wells, 3 were inundated from 55 to 94 percent of the time. All 13 wells had mean daily depths within 1.5 feet of land surface during some part of the year. Well W2-2 had water within 1.5 feet of land surface for 6 days, which

was 3 percent of the time. Well W4-2 had water within 1.5 feet of land surface 100 percent of the time.

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- U.S. Congress, 1977, Public Law 95-217, Clean Water Act of 1977: Washington, D.C.

Supplemental Data

[Daily rainfall amounts and mean daily water levels recorded at wells in the
Millington, Tennessee, study area]

Daily rainfall amounts at Millington, Tennessee, October 1, 1995 through September 30, 1996
 [Rainfall amounts, in inches; ---, no record]

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.99	.00	.19	.05	.00	.00	.01	.29	.00	.22	.18
2	.42	1.44	.00	.27	.03	.00	.00	.01	.32	.00	.01	.16
3	.10	.03	.00	.05	.00	.00	.00	.03	.04	.00	.00	.04
4	.01	.00	.00	.19	.00	.00	.07	.00	.02	.00	.00	.00
5	.00	.02	.00	.01	.44	.00	.01	.02	.00	.00	.00	.01
6	.08	.94	.34	.00	.01	.29	.00	.01	.02	.00	.00	.00
7	.00	1.45	.00	.00	.04	.06	.00	.02	.12	.20	.00	.00
8	.00	.00	.48	.00	.00	.00	.00	.02	.11	.20	.00	.35
9	.03	.02	.00	.00	.00	.15	.00	.02	.54	.00	.00	.00
10	.00	.24	.00	.00	.00	.00	.00	.04	1.68	.00	.00	.00
11	.00	.71	.00	.68	.00	.00	.00	.15	1.76	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.17	.27	.45	.00	.00	.00
13	.00	.01	.00	.00	.00	.00	.29	.19	.00	.00	.00	.00
14	.26	.00	.00	.00	.00	.00	.00	.16	.00	.22	.00	.00
15	.00	.23	.28	.00	.00	.29	.00	.18	.00	.02	.00	.44
16	.00	.00	.01	.00	.00	.07	.00	.16	.00	.55	.00	.49
17	.00	.00	.73	.00	.00	.00	.00	.11	.00	.00	.00	.00
18	.00	.01	.52	1.27	.00	.88	.00	.02	.80	.00	.56	.00
19	.00	.00	.06	.00	1.44	.08	.99	.00	.00	.00	.00	.00
20	.49	.00	.00	.01	.01	.00	.38	.00	.00	.00	.00	.09
21	.00	.00	.00	.00	.00	.00	.12	.00	.00	.00	.00	1.55
22	.00	.00	.00	.00	.00	.00	.08	.00	.00	1.31	.00	.01
23	.00	.44	.00	.82	.05	.00	.07	.00	.00	.01	.00	.00
24	.00	.00	.00	.55	.00	1.27	.03	.00	.00	.08	.00	.00
25	.00	.00	.00	.01	.00	.39	.07	.21	.00	.01	.59	.00
26	.29	.01	.00	.23	.00	.00	.02	.00	.00	.00	.48	.59
27	.93	.01	.00	.95	.00	.01	.64	.03	.09	.07	.96	
28	.07	.01	.00	.00	.00	.16	.01	.48	.00	.09	.01	.14
29	.00	.00	.00	.00	.00	.00	.03	.11	.00	.60	.00	.00
30	.00	.01	.09	.00	---	.00	.02	.00	.00	1.00	.00	.00
31	.00	---	1.10	.00	---	.42	---	.00	---	.61	.00	---
TOTAL	2.68	6.57	3.61	4.28	2.59	4.50	2.36	2.85	6.20	4.99	1.94	5.01

**14 Rainfall and Water-Level Data for a Wetland Area near Millington,
Shelby County, Tennessee, October 1995 through September 1996**

Mean daily water level at well W1-1 at Millington, Tennessee, October 1, 1995 through September 30, 1996

[Water level, in feet below land surface, water levels greater than 2 (>2.0) feet below land surface indicate that the water table in the soil was below the bottom of the well; ---, no record]

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	>2.0	>2.0	>2.0	1.36	.75	.51	.44	.90	>2.0	>2.0	>2.0	>2.0
2	>2.0	>2.0	>2.0	.68	.94	.61	.54	1.32	>2.0	>2.0	>2.0	>2.0
3	>2.0	>2.0	>2.0	1.13	1.46	.90	.66	1.63	>2.0	>2.0	>2.0	>2.0
4	>2.0	>2.0	>2.0	1.30	1.85	1.01	.77	1.91	1.55	>2.0	>2.0	>2.0
5	>2.0	>2.0	>2.0	1.45	1.92	.55	.99	>2.0	1.97	>2.0	>2.0	>2.0
6	>2.0	>2.0	>2.0	1.49	1.95	.33	1.09	>2.0	>2.0	>2.0	>2.0	>2.0
7	>2.0	>2.0	>2.0	1.65	1.77	.37	1.22	.35	.36	>2.0	>2.0	>2.0
8	>2.0	>2.0	>2.0	1.78	1.24	.56	1.35	.53	.51	>2.0	>2.0	>2.0
9	>2.0	>2.0	>2.0	1.74	1.10	.68	1.59	.92	.26	>2.0	>2.0	>2.0
10	>2.0	>2.0	>2.0	1.78	1.03	.79	1.76	1.36	.35	>2.0	>2.0	>2.0
11	>2.0	>2.0	>2.0	.98	1.19	.81	1.82	.46	.32	>2.0	>2.0	>2.0
12	>2.0	>2.0	>2.0	.60	1.38	.77	1.85	.55	.40	>2.0	>2.0	>2.0
13	>2.0	>2.0	>2.0	.70	1.31	.84	1.22	.81	.60	>2.0	>2.0	>2.0
14	>2.0	>2.0	>2.0	.77	1.18	.91	1.10	1.07	1.01	>2.0	>2.0	>2.0
15	>2.0	>2.0	>2.0	.95	1.43	.65	1.30	1.33	1.51	>2.0	>2.0	>2.0
16	>2.0	>2.0	>2.0	.91	1.71	.54	1.60	1.69	1.90	>2.0	>2.0	>2.0
17	>2.0	>2.0	>2.0	.85	1.68	.72	1.78	>2.0	>2.0	>2.0	>2.0	>2.0
18	>2.0	>2.0	>2.0	.47	1.71	.61	1.86	>2.0	1.38	>2.0	>2.0	>2.0
19	>2.0	>2.0	>2.0	.59	.78	.35	.68	>2.0	1.16	>2.0	>2.0	>2.0
20	>2.0	>2.0	>2.0	.69	.44	.47	.38	>2.0	1.66	>2.0	>2.0	>2.0
21	>2.0	>2.0	>2.0	.70	.49	.56	.44	>2.0	1.99	>2.0	>2.0	>2.0
22	>2.0	>2.0	>2.0	.69	.50	.70	.35	>2.0	>2.0	>2.0	>2.0	>2.0
23	>2.0	>2.0	>2.0	.45	.52	.85	.37	>2.0	>2.0	>2.0	>2.0	>2.0
24	>2.0	>2.0	>2.0	.38	.76	.90	.50	>2.0	>2.0	>2.0	>2.0	>2.0
25	>2.0	>2.0	>2.0	.24	.80	.35	.67	>2.0	>2.0	>2.0	>2.0	>2.0
26	>2.0	>2.0	>2.0	.14	.78	.53	1.11	>2.0	>2.0	>2.0	>2.0	>2.0
27	>2.0	>2.0	>2.0	.49	.65	.61	1.61	>2.0	>2.0	>2.0	>2.0	>2.0
28	>2.0	>2.0	>2.0	.52	.41	.54	1.80	>2.0	>2.0	>2.0	>2.0	>2.0
29	>2.0	>2.0	>2.0	.50	.52	.50	.95	>2.0	>2.0	>2.0	>2.0	>2.0
30	>2.0	>2.0	>2.0	.56	---	.51	.55	>2.0	>2.0	>2.0	>2.0	>2.0
31	>2.0	>2.0	---	1.49	.70	---	.34	---	---	>2.0	>2.0	---
MEAN	>2.0	>2.0	---	.88	1.11	.62	1.08	---	---	>2.0	>2.0	>2.0

Mean daily water level at well W1-2 at Millington, Tennessee, October 1, 1995 through September 30, 1996

[Water level, in feet below land surface; water levels greater than 2 (>2.0) feet below land surface indicate that the water table in the soil was below the bottom of the well; negative values indicate ponded conditions; ---, no record]

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	>2.0	>2.0	>2.0	-.15	-.05	-.10	-.11	-.07	>2.0	>2.0	.55	>2.0
2	>2.0	>2.0	>2.0	-.19	-.02	-.08	-.10	-.02	>2.0	1.98	>2.0	>2.0
3	>2.0	>2.0	>2.0	-.12	.32	-.05	-.09	.08	>2.0	>2.0	>2.0	>2.0
4	>2.0	>2.0	>2.0	-.09	.79	-.04	-.08	.49	>2.0	>2.0	>2.0	>2.0
5	>2.0	>2.0	>2.0	-.07	.69	-.09	-.06	1.18	>2.0	>2.0	>2.0	>2.0
6	>2.0	>2.0	>2.0	-.05	.93	-.12	-.05	1.62	>2.0	>2.0	>2.0	>2.0
7	>2.0	.57	>2.0	-.02	.75	-.13	-.02	-.01	-.10	>2.0	>2.0	>2.0
8	>2.0	.13	>2.0	.00	.04	-.10	.01	-.01	-.02	>2.0	>2.0	>2.0
9	>2.0	.91	>2.0	.01	.01	-.08	.06	.04	-.17	>2.0	>2.0	>2.0
10	>2.0	1.62	>2.0	.01	.02	-.07	.17	.12	-.04	>2.0	>2.0	>2.0
11	>2.0	1.10	>2.0	-.07	.06	-.07	.30	-.06	-.05	>2.0	>2.0	>2.0
12	>2.0	1.24	>2.0	-.11	.12	-.06	.43	-.02	-.05	>2.0	>2.0	>2.0
13	>2.0	1.68	>2.0	-.09	.14	-.04	.06	.01	-.01	>2.0	>2.0	>2.0
14	>2.0	>2.0	>2.0	-.07	.14	-.03	.00	.04	.04	>2.0	>2.0	>2.0
15	>2.0	>2.0	>2.0	-.05	.25	-.06	.03	.10	.25	>2.0	>2.0	>2.0
16	>2.0	>2.0	>2.0	-.05	.42	-.09	.09	.34	1.11	>2.0	>2.0	>2.0
17	>2.0	>2.0	>2.0	-.05	.44	-.07	.19	1.12	1.99	>2.0	>2.0	>2.0
18	>2.0	>2.0	.96	-.15	.52	-.09	.35	1.96	1.25	>2.0	>2.0	>2.0
19	>2.0	>2.0	>2.0	.00	-.14	.07	-.14	-.03	>2.0	.79	>2.0	>2.0
20	>2.0	>2.0	>2.0	.05	-.10	-.14	-.11	-.20	>2.0	1.65	>2.0	>2.0
21	>2.0	>2.0	>2.0	.10	-.10	-.11	-.09	-.14	>2.0	>2.0	>2.0	.52
22	>2.0	>2.0	>2.0	.20	-.09	-.09	-.08	-.14	>2.0	>2.0	>2.0	1.30
23	>2.0	>2.0	>2.0	.35	-.13	-.08	-.06	-.14	>2.0	>2.0	>2.0	>2.0
24	>2.0	>2.0	>2.0	.49	-.20	-.05	-.05	-.12	>2.0	>2.0	>2.0	>2.0
25	>2.0	>2.0	.64	-.12	-.04	-.21	-.10	-.21	>2.0	>2.0	>2.0	>2.0
26	>2.0	>2.0	.80	-.12	-.04	-.13	-.05	>2.0	>2.0	>2.0	>2.0	>2.0
27	>2.0	>2.0	.97	-.10	-.07	-.11	.02	>2.0	>2.0	>2.0	>2.0	>2.0
28	>2.0	>2.0	1.17	-.09	-.15	-.10	.20	>2.0	>2.0	>2.0	>2.0	>2.0
29	>2.0	>2.0	1.27	-.08	-.11	-.10	.04	>2.0	2.0	1.97	>2.0	>2.0
30	>2.0	>2.0	1.29	-.07	---	-.10	-.12	>2.0	>2.0	.04	>2.0	>2.0
31	>2.0	---	---	.09	-.05	---	-.13	---	>2.0	---	.03	>2.0
MEAN	>2.0	---	---	-.09	.16	-.09	.01	---	---	---	---	---

[Water level, in feet below land surface; water levels greater than 2 (>2.0) feet below land surface indicate that the water table in the soil was below the bottom of the well; ---, no record]

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	>2.0	>2.0	>2.0	.21	.39	.31	.21	.40	1.64	>2.0	>2.0	>2.0
2	>2.0	>2.0	>2.0	.14	.44	.36	.28	.68	.72	>2.0	>2.0	>2.0
3	>2.0	>2.0	>2.0	.22	.49	.53	.36	.98	1.10	>2.0	>2.0	>2.0
4	>2.0	>2.0	>2.0	.28	.82	.70	.37	1.25	.70	>2.0	>2.0	>2.0
5	>2.0	>2.0	>2.0	.34	1.32	.33	.47	1.42	1.04	>2.0	>2.0	>2.0
6	>2.0	>2.0	>2.0	.40	1.42	.13	.59	1.47	1.34	>2.0	>2.0	>2.0
7	>2.0	1.96	>2.0	.50	1.47	.16	.72	.15	.17	>2.0	>2.0	>2.0
8	>2.0	>2.0	>2.0	.65	1.22	.27	.83	.26	.25	>2.0	>2.0	>2.0
9	>2.0	>2.0	>2.0	.68	.90	.37	1.00	.51	.11	>2.0	>2.0	>2.0
10	>2.0	>2.0	>2.0	.70	.77	.49	1.19	.88	.19	>2.0	>2.0	>2.0
11	>2.0	>2.0	>2.0	.37	.73	.59	1.32	.23	.16	>2.0	>2.0	>2.0
12	>2.0	>2.0	>2.0	.19	.82	.63	1.40	.29	.22	>2.0	>2.0	>2.0
13	>2.0	>2.0	>2.0	.24	.91	.68	.87	.52	.41	>2.0	>2.0	>2.0
14	>2.0	>2.0	>2.0	.28	.91	.73	.34	.77	.78	>2.0	>2.0	>2.0
15	>2.0	>2.0	>2.0	.34	.95	.52	.37	.98	1.25	>2.0	>2.0	>2.0
16	>2.0	>2.0	>2.0	.39	1.07	.25	.59	1.28	1.51	>2.0	>2.0	>2.0
17	>2.0	>2.0	>2.0	.40	1.19	.28	.80	1.48	1.65	>2.0	>2.0	>2.0
18	>2.0	>2.0	>2.0	.40	.21	1.25	.25	.97	1.60	1.34	>2.0	>2.0
19	>2.0	>2.0	>2.0	.69	.24	.67	.14	.31	1.67	.83	>2.0	>2.0
20	>2.0	>2.0	>2.0	.65	.31	.23	.21	.14	1.74	1.21	>2.0	>2.0
21	>2.0	>2.0	>2.0	.81	.34	.25	.27	.17	1.80	1.55	>2.0	>2.0
22	>2.0	>2.0	>2.0	.97	.40	.27	.36	.14	1.85	1.71	>2.0	>2.0
23	>2.0	>2.0	>2.0	1.12	.28	.29	.49	.16	1.91	1.82	>2.0	>2.0
24	>2.0	>2.0	>2.0	1.25	.16	.41	.56	.23	1.96	1.92	>2.0	>2.0
25	>2.0	>2.0	>2.0	1.34	.24	.51	.20	.31	>2.0	>2.0	>2.0	>2.0
26	>2.0	>2.0	>2.0	1.44	.17	.54	.26	.52	>2.0	>2.0	>2.0	>2.0
27	>2.0	>2.0	>2.0	1.52	.22	.46	.33	.89	>2.0	>2.0	>2.0	>2.0
28	>2.0	>2.0	>2.0	1.60	.28	.21	.28	1.16	>2.0	>2.0	>2.0	>2.0
29	>2.0	>2.0	>2.0	1.65	.28	.27	.21	.51	1.98	>2.0	>2.0	>2.0
30	>2.0	>2.0	>2.0	1.70	.31	---	.24	.22	1.99	>2.0	>2.0	>2.0
31	>2.0	>2.0	>2.0	---	---	.61	.36	.15	---	---	>2.0	---
MEAN	>2.0	>2.0	>2.0	---	---	.33	.73	.36	.58	---	>2.0	>2.0

Mean daily water level at well W1-4 at Millington, Tennessee, October 1, 1995 through September 30, 1996

[Water level, in feet below land surface; water levels greater than 2 (>2.0) feet below land surface indicate that the water table in the soil was below the bottom of the well; ---, no record]

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	>2.0	>2.0	>2.0	>2.0	.47	.15	.13	.19	>2.0	>2.0	>2.0	>2.0
2	>2.0	>2.0	>2.0	>2.0	.44	.18	.17	.25	1.82	>2.0	>2.0	>2.0
3	>2.0	>2.0	>2.0	>2.0	.48	.23	.19	.34	1.82	>2.0	>2.0	>2.0
4	>2.0	>2.0	>2.0	>2.0	.66	.26	.18	.47	1.57	>2.0	>2.0	>2.0
5	>2.0	>2.0	>2.0	>2.0	1.17	.15	.21	.69	1.65	>2.0	>2.0	>2.0
6	>2.0	>2.0	>2.0	>2.0	1.34	.09	.24	.93	1.75	>2.0	>2.0	>2.0
7	>2.0	>2.0	>2.0	>2.0	1.38	.10	.27	.16	.45	>2.0	>2.0	>2.0
8	>2.0	>2.0	>2.0	>2.0	1.18	.16	.30	.13	.16	>2.0	>2.0	>2.0
9	>2.0	>2.0	>2.0	>2.0	1.01	.20	.37	.20	.02	>2.0	>2.0	>2.0
10	>2.0	>2.0	>2.0	>2.0	.90	.22	.49	.28	.08	>2.0	>2.0	>2.0
11	>2.0	>2.0	>2.0	>2.0	.86	.23	.60	.08	.07	>2.0	>2.0	>2.0
12	>2.0	>2.0	>2.0	>2.0	.88	.23	.66	.13	.08	>2.0	>2.0	>2.0
13	>2.0	>2.0	>2.0	>2.0	.91	.24	.35	.17	.13	>2.0	>2.0	>2.0
14	>2.0	>2.0	>2.0	>2.0	.88	.24	.23	.21	.22	>2.0	>2.0	>2.0
15	>2.0	>2.0	>2.0	>2.0	.89	.18	.28	.24	.40	>2.0	>2.0	>2.0
16	>2.0	>2.0	>2.0	>2.0	.99	.15	.39	.34	.54	>2.0	>2.0	>2.0
17	>2.0	>2.0	>2.0	>2.0	1.08	.21	.50	.58	.95	>2.0	>2.0	>2.0
18	>2.0	>2.0	>2.0	>2.0	1.14	.16	.61	.92	.72	>2.0	>2.0	>2.0
19	>2.0	>2.0	>2.0	>2.0	1.73	.56	.09	.19	1.29	>2.0	>2.0	>2.0
20	>2.0	>2.0	>2.0	>2.0	1.77	.13	.14	.05	1.54	>2.0	>2.0	>2.0
21	>2.0	>2.0	>2.0	>2.0	1.85	.16	.17	.09	1.73	1.10	>2.0	>2.0
22	>2.0	>2.0	>2.0	>2.0	1.90	.19	.20	.08	1.88	1.40	>2.0	>2.0
23	>2.0	>2.0	>2.0	>2.0	1.83	.19	.22	.09	>2.0	1.61	>2.0	>2.0
24	>2.0	>2.0	>2.0	>2.0	1.14	.24	.22	.12	>2.0	1.79	>2.0	>2.0
25	>2.0	>2.0	>2.0	>2.0	.89	.27	.05	.14	>2.0	1.94	>2.0	>2.0
26	>2.0	>2.0	>2.0	>2.0	.66	.26	.13	.18	>2.0	>2.0	>2.0	>2.0
27	>2.0	>2.0	>2.0	>2.0	.59	.20	.15	.26	>2.0	>2.0	>2.0	>2.0
28	>2.0	>2.0	>2.0	>2.0	.55	.09	.13	.33	>2.0	>2.0	>2.0	>2.0
29	>2.0	>2.0	>2.0	>2.0	.46	.14	.14	.15	>2.0	>2.0	>2.0	>2.0
30	>2.0	>2.0	>2.0	>2.0	.43	---	.15	.14	>2.0	>2.0	>2.0	>2.0
31	>2.0	---	>2.0	>2.0	.44	---	.10	---	>2.0	---	>2.0	---
MEAN	>2.0	>2.0	>2.0	>2.0	---	.66	.17	.27	---	>2.0	>2.0	>2.0

**18 Rainfall and Water-Level Data for a Wetland Area near Millington,
Shelby County, Tennessee, October 1995 through September 1996**

Mean daily water level at well W1-5 at Millington, Tennessee, October 1, 1995 through September 30, 1996
 [Water level, in feet below land surface; water levels greater than 2 (>2.0) feet below land surface indicate that the water table in the soil was below the bottom of the well; ---, no record]

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	>2.0	>2.0	>2.0	.38	.60	.46	.40	.91	1.88	>2.0	>2.0	>2.0
2	>2.0	1.82	>2.0	.34	.72	.57	.47	1.48	>2.0	>2.0	>2.0	>2.0
3	>2.0	>2.0	>2.0	.42	1.28	.84	.58	1.89	1.94	>2.0	>2.0	>2.0
4	>2.0	>2.0	>2.0	.50	1.76	.95	.68	>2.0	1.59	>2.0	>2.0	>2.0
5	>2.0	>2.0	>2.0	.63	1.93	.54	.89	>2.0	>2.0	>2.0	>2.0	>2.0
6	>2.0	>2.0	>2.0	.72	1.86	.34	1.00	>2.0	>2.0	>2.0	>2.0	>2.0
7	>2.0	1.03	>2.0	.92	1.24	.35	1.11	.36	.36	>2.0	>2.0	>2.0
8	>2.0	1.70	>2.0	1.09	.67	.47	1.23	.58	.66	>2.0	>2.0	>2.0
9	>2.0	>2.0	>2.0	.97	.62	.59	1.45	1.24	.24	>2.0	>2.0	>2.0
10	>2.0	>2.0	>2.0	.97	.62	.68	1.63	1.85	.37	>2.0	>2.0	>2.0
11	>2.0	1.68	>2.0	.55	.79	.76	1.70	.57	.34	>2.0	>2.0	>2.0
12	>2.0	1.57	>2.0	.38	.99	.74	1.75	.59	.44	>2.0	>2.0	>2.0
13	>2.0	1.96	>2.0	.41	.96	.81	.83	1.03	.80	>2.0	>2.0	>2.0
14	>2.0	>2.0	>2.0	.45	.83	.87	.71	1.38	1.44	>2.0	>2.0	>2.0
15	>2.0	>2.0	>2.0	.55	1.07	.59	1.02	1.70	>2.0	>2.0	>2.0	>2.0
16	>2.0	>2.0	>2.0	.54	1.35	.45	1.36	>2.0	>2.0	>2.0	>2.0	>2.0
17	>2.0	>2.0	>2.0	.51	1.33	.58	1.57	>2.0	>2.0	>2.0	>2.0	>2.0
18	>2.0	>2.0	>2.0	.36	1.38	.58	1.72	>2.0	1.42	>2.0	>2.0	>2.0
19	>2.0	>2.0	>2.0	.58	.40	.66	.34	.62	>2.0	1.37	>2.0	>2.0
20	>2.0	>2.0	>2.0	1.01	.43	.37	.41	.32	>2.0	>2.0	>2.0	>2.0
21	>2.0	>2.0	>2.0	1.29	.48	.41	.48	.38	>2.0	>2.0	>2.0	1.94
22	>2.0	>2.0	>2.0	1.58	.48	.44	.61	.35	>2.0	>2.0	>2.0	>2.0
23	>2.0	>2.0	>2.0	1.73	.36	.48	.76	.36	>2.0	>2.0	>2.0	>2.0
24	>2.0	>2.0	>2.0	1.83	.33	.67	.82	.46	>2.0	>2.0	>2.0	>2.0
25	>2.0	>2.0	>2.0	1.91	.37	.74	.33	.65	>2.0	>2.0	>2.0	>2.0
26	>2.0	>2.0	>2.0	1.99	.34	.74	.42	1.16	>2.0	>2.0	>2.0	>2.0
27	>2.0	>2.0	>2.0	.41	.65	.48	1.71	>2.0	>2.0	>2.0	>2.0	>2.0
28	>2.0	>2.0	>2.0	.43	.36	.48	1.96	>2.0	>2.0	>2.0	>2.0	>2.0
29	>2.0	>2.0	>2.0	.44	.44	.44	1.05	>2.0	>2.0	1.93	>2.0	>2.0
30	>2.0	>2.0	>2.0	.49	---	.47	.49	>2.0	>2.0	1.70	>2.0	>2.0
31	>2.0	>2.0	>2.0	.71	.58	---	.36	---	>2.0	>2.0	>2.0	---
MEAN	>2.0	---	---	---	.52	.90	.57	.99	---	---	---	---

Mean daily water level at well W2-1 at Millington, Tennessee, October 1, 1995 through September 30, 1996

[Water level, in feet below land surface; water levels greater than 1.8 (>1.8) feet below land surface indicate that the water table in the soil was below the bottom of the well; ---, no record]

	DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.15	>1.8	>1.8	>1.8	>1.8	>1.8
2	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.47	>1.8	>1.8	>1.8	>1.8	>1.8
3	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.68	>1.8	>1.8	>1.8	>1.8	>1.8
4	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.8	>1.8	>1.8	>1.8	>1.8	>1.8
5	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.8	>1.8	>1.8	>1.8	>1.8	>1.8
6	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.8	>1.8	>1.8	>1.8	>1.8	>1.8
7	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.61	>1.8	1.24	1.40	>1.8	>1.8
8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.78	>1.8	>1.8	>1.8	>1.8	>1.8
9	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.8	>1.8	>1.8	>1.8	>1.8	>1.8
10	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.8	>1.8	>1.8	>1.8	>1.8	>1.8
11	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.8	>1.8	1.31	.78	>1.8	>1.8
12	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.8	>1.8	.92	>1.8	>1.8	>1.8
13	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.8	>1.8	1.52	>1.8	>1.8	>1.8
14	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.8	>1.8	>1.8	>1.8	>1.8	>1.8
15	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.8	>1.8	>1.8	>1.8	>1.8	>1.8
16	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.8	>1.8	1.8	>1.8	>1.8	>1.8
17	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.8	>1.8	1.8	>1.8	>1.8	>1.8
18	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.8	>1.8	1.8	>1.8	>1.8	>1.8
19	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.8	>1.8	1.8	>1.8	>1.8	>1.8
20	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.8	>1.8	1.75	>1.8	>1.8	>1.8
21	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.72	>1.8	>1.8	>1.8	>1.8	>1.8
22	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.8	>1.8	1.8	>1.8	>1.8	>1.8
23	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.8	>1.8	1.55	>1.8	>1.8	>1.8
24	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.8	>1.8	1.74	>1.8	>1.8	>1.8
25	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.8	>1.8	.82	>1.8	>1.8	>1.8
26	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.8	>1.8	1.38	>1.8	>1.8	>1.8
27	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.57	>1.8	1.8	>1.8	>1.8	>1.8
28	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.65	>1.8	1.8	>1.8	>1.8	>1.8
29	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.61	>1.8	1.8	>1.8	>1.8	>1.8
30	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	1.67	>1.8	1.8	>1.8	>1.8	>1.8
31	>1.8	---	---	---	---	---	---	1.02	---	1.8	---	1.8	---
MEAN	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	---	---	---	---	---	>1.8

Mean daily water level at well W2-2 at Millington, Tennessee, October 1, 1995 through September 30, 1996

[Water level, in feet below land surface; water levels greater than 1.8 (>1.8) feet below land surface indicate that the water table in the soil was below the bottom of the well; --, no record]

Mean daily water level at well W2-3 at Millington, Tennessee, October 1, 1995 through September 30, 1996

[Water level, in feet below land surface; water levels greater than 2 (>2.0) feet below land surface indicate that the water table in the soil was below the bottom of the well; ---, no record]

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	>2.0	>2.0	>2.0	1.09	.56	.28	.53	>2.0	>2.0	>2.0	>2.0	>2.0
2	>2.0	1.60	>2.0	1.16	.62	.36	.65	>2.0	>2.0	>2.0	>2.0	>2.0
3	>2.0	>2.0	>2.0	1.29	.82	.40	.83	>2.0	>2.0	>2.0	>2.0	>2.0
4	>2.0	>2.0	>2.0	1.47	.97	.46	1.02	>2.0	>2.0	>2.0	>2.0	>2.0
5	>2.0	>2.0	>2.0	1.61	.74	.56	1.21	>2.0	>2.0	>2.0	>2.0	>2.0
6	>2.0	>2.0	>2.0	1.69	.37	.64	1.38	>2.0	>2.0	>2.0	>2.0	>2.0
7	>2.0	1.05	>2.0	1.78	.27	.71	.56	.37	>2.0	>2.0	>2.0	>2.0
8	>2.0	1.81	>2.0	1.81	.43	.77	.34	.34	>2.0	>2.0	>2.0	>2.0
9	>2.0	>2.0	>2.0	1.86	.57	.89	.48	.18	>2.0	>2.0	>2.0	>2.0
10	>2.0	>2.0	>2.0	1.90	.64	1.01	.71	.23	>2.0	>2.0	>2.0	>2.0
11	>2.0	1.98	>2.0	1.94	.68	1.10	.52	.21	>2.0	>2.0	>2.0	>2.0
12	>2.0	>2.0	>2.0	1.98	.69	1.16	.35	.24	>2.0	>2.0	>2.0	>2.0
13	>2.0	>2.0	>2.0	>2.0	.74	1.02	.42	.42	>2.0	>2.0	>2.0	>2.0
14	>2.0	>2.0	>2.0	>2.0	.81	.86	.54	.66	>2.0	>2.0	>2.0	>2.0
15	>2.0	>2.0	>2.0	>2.0	.71	.84	.67	.97	>2.0	>2.0	>2.0	>2.0
16	>2.0	>2.0	>2.0	>2.0	.56	.95	.87	1.28	>2.0	>2.0	>2.0	>2.0
17	>2.0	>2.0	>2.0	>2.0	.65	1.06	1.11	1.60	>2.0	>2.0	>2.0	>2.0
18	>2.0	>2.0	>2.0	>2.0	.67	1.15	1.35	1.63	>2.0	>2.0	>2.0	>2.0
19	>2.0	>2.0	>2.0	1.54	1.56	.30	.77	1.58	1.35	>2.0	>2.0	>2.0
20	>2.0	>2.0	>2.0	1.55	.54	.40	1.79	1.44	>2.0	>2.0	>2.0	>2.0
21	>2.0	>2.0	>2.0	1.62	.54	.41	.31	1.98	1.63	>2.0	>2.0	1.19
22	>2.0	>2.0	>2.0	1.66	.58	.49	.24	>2.0	1.84	>2.0	>2.0	1.50
23	>2.0	>2.0	>2.0	1.59	.65	.59	.21	>2.0	>2.0	>2.0	>2.0	1.82
24	>2.0	>2.0	>2.0	.69	.87	.66	.26	>2.0	>2.0	>2.0	>2.0	>2.0
25	>2.0	>2.0	>2.0	.65	.99	.36	.33	>2.0	>2.0	>2.0	>2.0	>2.0
26	>2.0	>2.0	>2.0	.62	1.04	.36	.45	>2.0	>2.0	>2.0	>2.0	>2.0
27	>2.0	>2.0	>2.0	.62	1.00	.39	.68	>2.0	>2.0	>2.0	>2.0	1.92
28	>2.0	>2.0	>2.0	.74	.47	.35	.87	>2.0	>2.0	>2.0	>2.0	1.55
29	>2.0	>2.0	>2.0	.80	.52	.31	.85	>2.0	>2.0	>2.0	>2.0	1.83
30	>2.0	>2.0	>2.0	.88	---	.31	.56	>2.0	>2.0	>2.0	>2.0	>2.0
31	>2.0	---	---	1.01	---	.25	---	>2.0	---	>2.0	>2.0	---
MEAN	>2.0	---	>2.0	---	---	.54	.67	---	---	>2.0	>2.0	---

Mean daily water level at well W2-4 at Millington, Tennessee, October 1, 1995 through September 30, 1996
 [Water level, in feet below land surface; water levels greater than 2 (>2.0) feet below land surface indicate that the water table in the soil was below the bottom of the well; ---, no record]

	DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	>2.0	>2.0	>2.0	.23	.42	.33	.25	.56	1.81	>2.0	>2.0	>2.0	>2.0
2	>2.0	>2.0	>2.0	.16	.44	.43	.34	1.01	.48	>2.0	>2.0	>2.0	>2.0
3	>2.0	>2.0	>2.0	.24	.69	.60	.48	1.43	.82	>2.0	>2.0	>2.0	>2.0
4	>2.0	>2.0	>2.0	.27	1.28	.75	.61	1.76	.45	>2.0	>2.0	>2.0	>2.0
5	>2.0	>2.0	>2.0	.34	1.62	.56	.71	>2.0	.91	>2.0	>2.0	>2.0	>2.0
6	>2.0	>2.0	>2.0	.40	1.78	.23	.83	>2.0	1.35	>2.0	>2.0	>2.0	>2.0
7	>2.0	>2.0	>2.0	.52	1.80	.20	.99	.38	.19	>2.0	>2.0	>2.0	>2.0
8	>2.0	>2.0	>2.0	.70	1.21	.30	1.14	.28	.22	>2.0	>2.0	>2.0	>2.0
9	>2.0	>2.0	1.95	.72	.67	.38	1.34	.57	.16	>2.0	>2.0	>2.0	>2.0
10	>2.0	>2.0	1.87	.69	.57	.46	1.54	1.07	.21	>2.0	>2.0	>2.0	>2.0
11	>2.0	>2.0	1.85	.40	.62	.54	1.69	.36	.19	>2.0	>2.0	>2.0	>2.0
12	>2.0	>2.0	1.88	.23	.78	.61	1.79	.30	.23	>2.0	>2.0	>2.0	>2.0
13	>2.0	>2.0	1.90	.25	.89	.70	1.64	.53	.36	>2.0	>2.0	>2.0	>2.0
14	>2.0	>2.0	1.92	.29	.90	.77	1.08	.79	.65	>2.0	>2.0	>2.0	>2.0
15	>2.0	>2.0	1.95	.36	1.02	.67	1.03	1.03	1.18	>2.0	>2.0	>2.0	>2.0
16	>2.0	>2.0	1.95	.41	1.21	.46	1.27	1.40	1.68	>2.0	>2.0	>2.0	>2.0
17	>2.0	>2.0	1.81	.42	1.34	.50	1.52	1.76	>2.0	>2.0	>2.0	>2.0	>2.0
18	>2.0	>2.0	.60	.28	1.39	.49	1.75	>2.0	1.34	>2.0	>2.0	>2.0	>2.0
19	>2.0	>2.0	.24	.26	.71	.18	.93	>2.0	.63	>2.0	>2.0	>2.0	>2.0
20	>2.0	>2.0	.36	.32	.23	.26	.24	>2.0	1.15	>2.0	>2.0	>2.0	>2.0
21	>2.0	>2.0	.51	.30	.25	.30	.27	>2.0	1.71	>2.0	>2.0	>2.0	>2.0
22	>2.0	>2.0	.64	.37	.28	.41	.21	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
23	>2.0	>2.0	.78	.29	.30	.56	.21	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
24	>2.0	>2.0	.90	.20	.44	.68	.32	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
25	>2.0	>2.0	1.03	.25	.54	.22	.53	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
26	>2.0	>2.0	1.15	.21	.58	.29	.96	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
27	>2.0	>2.0	1.27	.25	.50	.40	1.46	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
28	>2.0	>2.0	1.40	.31	.23	.44	1.73	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
29	>2.0	>2.0	1.52	.32	.29	.33	1.22	1.72	>2.0	>2.0	>2.0	>2.0	>2.0
30	>2.0	>2.0	1.62	.38	---	.33	.34	1.84	>2.0	>2.0	>2.0	>2.0	>2.0
31	>2.0	---	.71	.44	---	.24	---	>2.0	---	>2.0	>2.0	>2.0	---
MEAN	>2.0	>2.0	---	.35	.79	.44	.95	---	---	---	---	---	>2.0

Mean daily water level at well W3-1 at Millington, Tennessee, October 1, 1995 through September 30, 1996

[Water level, in feet below land surface; water levels greater than 2 (>2.0) feet below land surface indicate that the water table in the soil was below the bottom of the well; ---, no record]

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	>2.0	>2.0	>2.0	.45	---	---	.44	1.02	1.72	>2.0	>2.0	>2.0
2	>2.0	1.88	>2.0	.56	---	---	.72	1.70	.44	>2.0	>2.0	>2.0
3	>2.0	>2.0	>2.0	.77	---	---	1.13	>2.0	.76	>2.0	>2.0	>2.0
4	>2.0	>2.0	>2.0	.93	---	---	1.54	>2.0	.42	>2.0	>2.0	>2.0
5	>2.0	>2.0	>2.0	1.17	---	---	1.83	>2.0	.91	>2.0	>2.0	>2.0
6	>2.0	>2.0	>2.0	1.40	---	---	>2.0	>2.0	1.51	>2.0	>2.0	>2.0
7	>2.0	.74	>2.0	1.55	---	---	>2.0	.28	.24	>2.0	>2.0	>2.0
8	>2.0	.71	>2.0	1.87	---	---	>2.0	.44	.34	>2.0	>2.0	>2.0
9	>2.0	.98	>2.0	1.94	---	---	>2.0	1.05	.16	>2.0	>2.0	>2.0
10	>2.0	1.24	>2.0	1.68	---	---	>2.0	1.75	.28	>2.0	>2.0	>2.0
11	>2.0	.48	>2.0	.88	---	---	>2.0	.48	.26	>2.0	>2.0	>2.0
12	>2.0	.44	>2.0	.53	---	---	>2.0	.50	.39	>2.0	>2.0	>2.0
13	>2.0	.65	>2.0	.57	---	---	>2.0	.97	.78	>2.0	>2.0	>2.0
14	>2.0	.95	>2.0	.62	---	---	>2.0	1.40	1.36	>2.0	>2.0	>2.0
15	>2.0	1.13	>2.0	.79	---	---	>2.0	1.74	1.95	>2.0	>2.0	>2.0
16	>2.0	1.13	>2.0	.86	---	---	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
17	>2.0	1.40	>2.0	---	---	---	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
18	>2.0	1.68	---	.31	---	---	>2.0	>2.0	1.23	>2.0	>2.0	>2.0
19	>2.0	1.90	---	.32	---	---	>2.0	.75	.69	>2.0	>2.0	>2.0
20	>2.0	>2.0	---	.40	---	---	>2.0	.34	1.44	>2.0	>2.0	>2.0
21	>2.0	>2.0	.51	---	---	---	>2.0	.47	>2.0	>2.0	>2.0	1.16
22	>2.0	>2.0	.73	---	---	---	>2.0	.36	>2.0	>2.0	>2.0	1.88
23	>2.0	>2.0	.98	---	---	---	>2.0	.37	>2.0	>2.0	>2.0	>2.0
24	>2.0	>2.0	1.20	---	---	---	>2.0	.66	>2.0	>2.0	>2.0	>2.0
25	>2.0	>2.0	1.46	---	---	---	>2.0	1.29	>2.0	>2.0	>2.0	>2.0
26	>2.0	>2.0	1.67	---	---	---	>2.0	.52	1.97	>2.0	>2.0	>2.0
27	>2.0	>2.0	1.85	---	---	---	>2.0	.81	>2.0	>2.0	>2.0	.44
28	>2.0	>2.0	>2.0	---	---	---	>2.0	.91	>2.0	.89	>2.0	.45
29	>2.0	>2.0	>2.0	---	---	---	>2.0	.70	1.21	.66	>2.0	1.07
30	>2.0	>2.0	>2.0	---	---	---	>2.0	.80	.50	1.46	>2.0	1.70
31	>2.0	---	---	.74	---	---	>2.0	.41	---	---	1.81	---
MEAN	>2.0	---	---	---	---	---	---	---	---	---	---	>2.0

Mean daily water level at well W3-2 at Millington, Tennessee, October 1, 1995 through September 30, 1996

[Water level, in feet below land surface; water levels greater than 2 (>2.0) feet below land surface indicate that the water table in the soil was below the bottom of the well; ---, no record]

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	>2.0	>2.0	1.90	.08	1.01	.28	.25	.75	1.32	>2.0	1.74	>2.0
2	>2.0	.62	1.99	.07	1.26	.41	.55	1.22	.36	>2.0	>2.0	>2.0
3	>2.0	1.50	>2.0	.13	1.84	.75	.92	1.55	.77	>2.0	>2.0	>2.0
4	>2.0	>2.0	>2.0	.17	>2.0	1.04	1.30	1.79	.25	>2.0	>2.0	>2.0
5	>2.0	>2.0	>2.0	.22	>2.0	.59	1.58	1.98	.80	>2.0	>2.0	>2.0
6	>2.0	>2.0	>2.0	.26	>2.0	.17	1.78	>2.0	1.19	>2.0	>2.0	>2.0
7	>2.0	.31	1.99	.56	>2.0	.11	1.90	.03	.05	>2.0	>2.0	>2.0
8	>2.0	.21	1.70	1.09	1.67	.45	>2.0	.25	.18	>2.0	>2.0	>2.0
9	>2.0	.37	1.07	1.19	1.14	.71	>2.0	.70	-.08	>2.0	>2.0	>2.0
10	>2.0	.53	1.40	.90	1.08	.60	>2.0	1.18	.05	>2.0	>2.0	>2.0
11	>2.0	.14	1.57	.27	1.18	.59	>2.0	.17	.03	>2.0	>2.0	>2.0
12	>2.0	.21	1.55	.11	1.39	.69	>2.0	.33	.17	>2.0	>2.0	>2.0
13	>2.0	.33	1.45	.15	1.48	.89	>2.0	.73	.51	>2.0	>2.0	>2.0
14	>2.0	.49	1.42	.17	1.49	1.08	>2.0	1.09	.95	>2.0	>2.0	>2.0
15	>2.0	.51	1.41	.23	1.67	.80	>2.0	1.33	1.38	>2.0	>2.0	>2.0
16	>2.0	.45	.96	.25	1.88	.68	>2.0	1.61	1.73	>2.0	>2.0	>2.0
17	>2.0	.58	.72	.24	1.95	.96	>2.0	1.84	1.95	>2.0	>2.0	>2.0
18	>2.0	.75	.08	.11	>2.0	.95	>2.0	>2.0	.86	>2.0	>2.0	>2.0
19	>2.0	.94	.11	.24	.85	.12	.49	>2.0	.43	>2.0	>2.0	>2.0
20	>2.0	1.09	.20	.30	.12	.25	.09	>2.0	1.02	>2.0	>2.0	>2.0
21	>2.0	1.28	.28	.15	.16	.41	.27	>2.0	1.49	>2.0	>2.0	>2.0
22	>2.0	1.47	.35	.14	.19	.66	.26	>2.0	1.82	1.90	>2.0	1.61
23	>2.0	.99	.44	.07	.21	.93	.18	>2.0	>2.0	>2.0	>2.0	>2.0
24	>2.0	.85	.55	.07	.37	1.14	.48	>2.0	>2.0	>2.0	>2.0	>2.0
25	>2.0	1.00	.73	.12	.53	.10	.91	>2.0	>2.0	>2.0	>2.0	>2.0
26	>2.0	1.07	.86	.10	.62	.32	1.41	>2.0	>2.0	>2.0	1.91	>2.0
27	>2.0	1.17	.95	.19	.51	.65	1.78	1.46	>2.0	>2.0	1.27	.80
28	>2.0	1.52	1.08	.31	.12	.80	1.91	.16	>2.0	>2.0	>2.0	.39
29	>2.0	1.72	1.29	.32	.23	.63	.78	.41	>2.0	1.70	>2.0	.54
30	>2.0	1.82	1.32	.36	---	.63	.29	1.17	>2.0	.52	>2.0	1.25
31	>2.0	---	.21	.69	---	.22	---	1.62	---	.64	>2.0	---
MEAN	>2.0	---	---	---	---	.30	---	.60	---	---	---	---

Mean daily water level at well W3–3 at Millington, Tennessee, October 1, 1995 through September 30, 1996

[Water level, in feet below land surface; water levels greater than 2 (>2.0) feet below land surface indicate that the water table in the soil was below the bottom of the well; negative values indicate ponded conditions; ---, no record]

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	>2.0	>2.0	- .15	- .32	- .64	- .36	- .42	- .49	- .45	- .44	- .43	- .11
2	>2.0	- .45	- .32	- .53	- .31	- .32	- .40	- .45	- .43	- .51	- .37	- .14
3	>2.0	- .42	- .31	- .47	- .31	- .31	- .39	- .43	- .41	- .49	- .34	- .11
4	>2.0	- .39	- .30	- .42	- .31	- .31	- .37	- .41	- .38	- .54	- .30	- .05
5	>2.0	- .40	- .30	- .40	- .31	- .31	- .42	- .41	- .36	- .45	>2.0	.06
6	>2.0	- .72	- .33	- .36	- .27	- .27	- .56	- .39	- .70	- .69	>2.0	- .18
7	>2.0	- .52	- .37	- .32	- .31	- .31	- .45	- .37	- .47	- .49	>2.0	- .13
8	>2.0	- .46	- .46	- .33	- .34	- .34	- .42	- .36	- .42	- .82	>2.0	.62
9	>2.0	- .42	- .40	- .35	- .36	- .41	- .34	- .34	- .34	- .56	>2.0	.48
10	>2.0	- .58	- .40	- .52	- .36	- .41	- .32	- .32	- .32	- .58	>2.0	.08
11	>2.0	- .49	- .40	- .54	- .35	- .40	- .30	- .30	- .30	- .54	>2.0	.78
12	>2.0	- .44	- .40	- .47	- .34	- .34	- .39	- .35	- .35	- .48	>2.0	.42
13	>2.0	- .41	- .39	- .43	- .33	- .33	- .38	- .36	- .36	- .44	>2.0	.75
14	>2.0	- .40	- .39	- .41	- .32	- .41	- .40	- .35	- .35	- .42	>2.0	.1.58
15	>2.0	- .41	- .42	- .42	- .39	- .31	- .41	- .41	- .41	- .42	>2.0	.1.77
16	>2.0	- .40	- .42	- .42	- .39	- .31	- .41	- .33	- .33	- .38	>2.0	.1.86
17	>2.0	- .38	- .40	- .44	- .39	- .30	- .40	- .31	- .31	- .34	>2.0	.2.2
18	>2.0	- .37	- .36	- .64	- .63	- .29	- .42	- .30	- .30	- .47	>2.0	.44
19	>2.0	- .36	- .37	- .56	- .53	- .54	- .55	- .55	- .57	- .50	>2.0	.62
20	>2.0	- .35	- .36	- .47	- .51	- .54	- .44	- .67	- .67	- .45	>2.0	.48
21	>2.0	- .35	- .42	- .42	- .47	- .45	- .42	- .48	- .48	- .42	>2.0	.06
22	>2.0	- .34	- .40	- .43	- .42	- .42	- .40	- .50	- .50	- .39	>2.0	.60
23	>2.0	- .39	- .38	- .54	- .40	- .39	- .53	- .53	- .53	- .35	>2.0	.88
24	>2.0	- .40	- .38	- .64	- .38	- .38	- .38	- .44	- .44	- .30	>2.0	.1.13
25	>2.0	- .39	- .37	- .53	- .37	- .37	- .70	- .41	- .41	- .22	>2.0	.1.34
26	>2.0	- .38	- .36	- .51	- .37	- .51	- .38	- .38	- .38	- .14	>2.0	.70
27	>2.0	- .38	- .35	- .47	- .47	- .47	- .36	- .36	- .36	- .04	>2.0	.60
28	>2.0	- .36	- .35	- .42	- .57	- .45	- .33	- .33	- .33	.16	>2.0	.88
29	>2.0	- .35	- .32	- .41	- .47	- .45	- .50	- .51	- .51	.45	>2.0	.1.34
30	>2.0	- .34	- .32	- .39	---	- .39	- .44	- .49	- .49	.75	- .66	- .40
31	>2.0	---	- .64	- .37	---	- .54	---	- .40	- .40	---	- .54	---
MEAN	>2.0	---	- .39	- .47	- .37	- .44	- .41	- .41	- .41	- .35	---	.34

**26 Rainfall and Water-Level Data for a Wetland Area near Millington,
Shelby County, Tennessee, October 1995 through September 1996**

Mean daily water level at well W4-2 at Millington, Tennessee, October 1, 1995 through September 30, 1996
 [Water level, in feet below land surface; water levels greater than 2 (>2.0) feet below land surface indicate that the water table in the soil was below the bottom of the well; negative values indicate ponded conditions; ---, no record]

	DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	>2.0	>2.0	>2.0	>2.0	.04	-.37	-.48	-.51	-.49	-.29	.63	>2.0	>2.0
2	>2.0	>2.0	>2.0	>2.0	-.10	-.37	-.47	-.49	-.47	-.40	1.03	>2.0	>2.0
3	>2.0	>2.0	>2.0	>2.0	-.09	-.37	-.45	-.48	-.45	-.39	1.42	>2.0	>2.0
4	>2.0	>2.0	>2.0	>2.0	-.06	-.37	-.44	-.47	-.43	-.42	1.75	>2.0	>2.0
5	>2.0	>2.0	>2.0	>2.0	-.02	-.37	-.46	-.46	-.41	-.40	1.96	>2.0	>2.0
6	>2.0	>2.0	>2.0	>2.0	.02	-.37	-.49	-.45	-.40	-.38	>2.0	>2.0	>2.0
7	>2.0	.68	>2.0	>2.0	.06	-.29	-.51	-.44	-.56	-.55	>2.0	>2.0	>2.0
8	>2.0	.14	>2.0	>2.0	.11	-.32	-.48	-.43	-.53	-.51	>2.0	>2.0	>2.0
9	>2.0	.27	>2.0	>2.0	.18	-.33	-.46	-.41	-.50	-.59	>2.0	>2.0	>2.0
10	>2.0	.39	>2.0	>2.0	.18	-.33	-.46	-.38	-.47	-.53	>2.0	>2.0	>2.0
11	>2.0	.20	>2.0	>2.0	.03	-.32	-.46	-.36	-.54	-.53	>2.0	>2.0	>2.0
12	>2.0	.31	>2.0	>2.0	-.08	-.30	-.45	-.35	-.51	-.53	>2.0	>2.0	>2.0
13	>2.0	.46	>2.0	>2.0	-.05	-.28	-.44	-.39	-.49	-.50	>2.0	>2.0	>2.0
14	>2.0	.77	>2.0	>2.0	-.03	-.28	-.44	-.39	-.48	-.48	>2.0	>2.0	>2.0
15	>2.0	1.06	>2.0	>2.0	.00	-.26	-.45	-.38	-.47	-.46	>2.0	>2.0	>2.0
16	>2.0	1.28	>2.0	>2.0	.02	-.23	-.45	-.36	-.45	-.42	>2.0	>2.0	>2.0
17	>2.0	1.50	>2.0	>2.0	.04	-.22	-.44	-.33	-.42	-.39	>2.0	>2.0	>2.0
18	>2.0	1.70	1.23	1.23	-.14	-.21	-.45	-.32	-.40	-.41	>2.0	>2.0	>2.0
19	>2.0	1.89	.47	.23	-.23	-.36	-.52	-.44	-.36	-.44	>2.0	>2.0	>2.0
20	>2.0	>2.0	>2.0	>2.0	.72	-.20	-.47	-.50	-.55	-.33	>2.0	>2.0	>2.0
21	>2.0	>2.0	.97	-.21	-.46	-.48	-.53	-.29	-.39	>2.0	>2.0	>2.0	>2.0
22	>2.0	>2.0	1.17	-.20	-.45	-.47	-.53	-.26	-.35	>2.0	>2.0	>2.0	>2.0
23	>2.0	1.41	1.41	1.41	-.25	-.45	-.46	-.54	-.22	-.31	>2.0	>2.0	>2.0
24	>2.0	1.57	1.57	1.57	-.46	-.43	-.46	-.51	-.18	-.27	>2.0	>2.0	>2.0
25	>2.0	1.69	1.69	1.69	-.44	-.42	-.44	-.49	-.13	-.23	>2.0	>2.0	>2.0
26	>2.0	>2.0	1.84	1.84	-.41	-.52	-.47	-.09	-.18	>2.0	>2.0	>2.0	>2.0
27	>2.0	>2.0	1.95	1.95	-.44	-.50	-.45	-.09	-.11	>2.0	>2.0	>2.0	>2.0
28	>2.0	>2.0	>2.0	>2.0	-.42	-.51	-.49	-.24	-.03	>2.0	>2.0	>2.0	>2.0
29	>2.0	>2.0	>2.0	>2.0	-.42	-.49	-.50	-.49	-.32	.09	>2.0	>2.0	>2.0
30	>2.0	>2.0	>2.0	>2.0	-.41	---	-.49	-.51	-.29	.28	>2.0	>2.0	>2.0
31	>2.0	---	---	---	.51	-.39	---	-.52	---	---	>2.0	>2.0	---
MEAN	>2.0	---	---	---	-.14	-.36	-.48	-.44	-.37	-.35	---	---	>2.0